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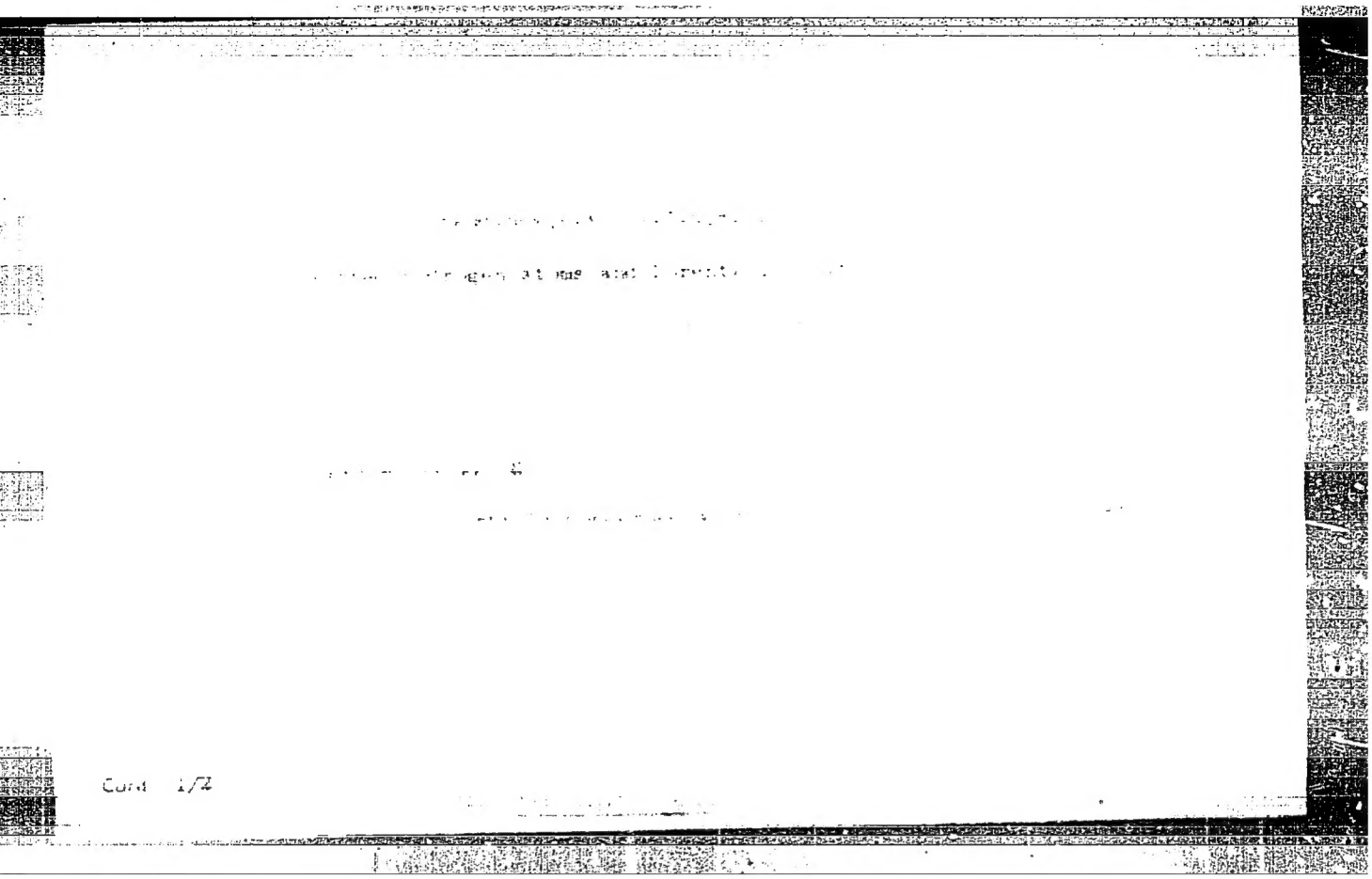

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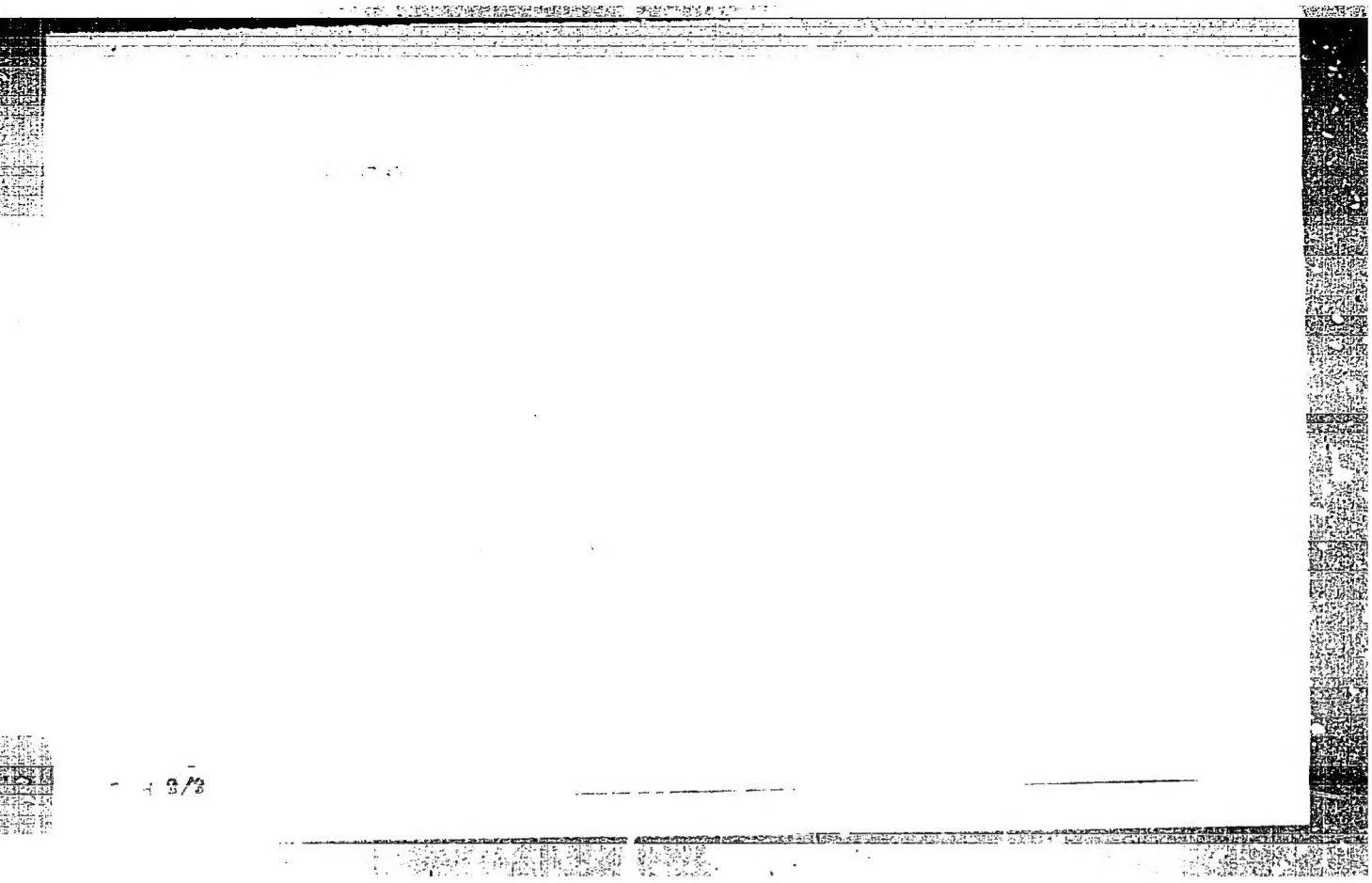

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

ACCESSION NR: AP4031139 S/0056/64/046/004/1208/1211

AUTHORS: Il'in, R. N.; Kikiani, B. I.; Oparin, V. A.; Solov'yev, Ye. S.; Fedorenko, N. V.

TITLE: Dissociation of positive hydrogen ions in collisions with atoms and gas molecules

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 4, 1964, 1208-1211

TOPIC TAGS: proton cross section, hydrogen, nitrogen, helium, argon, particle collision, ionization phenomena

ABSTRACT: The purpose of the work was to repeat the measurements of the cross section for the production of protons following dissociation of molecular ions H_2^+ with energy 10--180 keV in hydrogen, nitrogen, helium, and argon, using the same setup as previously (ZhETF v. 36, 385, 1959), but with a more thorough elimination of the main sources of the systematic errors. Comparison of the data obtained

Card 1/3

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ACCESSION NR: AP4031139

on these cross sections with the work published by others shows that over a wide energy range the majority of the curves obtained in recent work lies between the data of Sweetman (Proc. Roy. Soc. v. A256, 416, 1960 and private communication) and the early work by the authors, with the exception of the early data by C. F. Barnett (Second UN Intern. Conf. on Peaceful Uses of Atomic Energy, Geneva, 1958, Report 1789) which lie considerably below. Taken together, the various data cover almost the whole range of kiloelectron volt energies. For hydrogen, the maxima discovered and reported in the early work are confirmed, the first being due to the predominant contribution of the dissociation of H_2^+ ions into atoms and protons, and the second being related to the dissociation into two protons. A separate measurement of these two cross sections by J. Guidino (C. R. Paris, v. 253, 829, 1961) confirms these results. Orig. art. has: 4 figures and 1 formula.

Card 2/3

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

ACCESSION NR: AP4031139

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR (Physicotechnical Institute AN SSSR)

SUBMITTED: 18Oct63 DATE ACQ: 07May64 ENCL: 00

SUB CODE: NP, GP NR REF SOV: 005 OTHER: 006

Card 3/3

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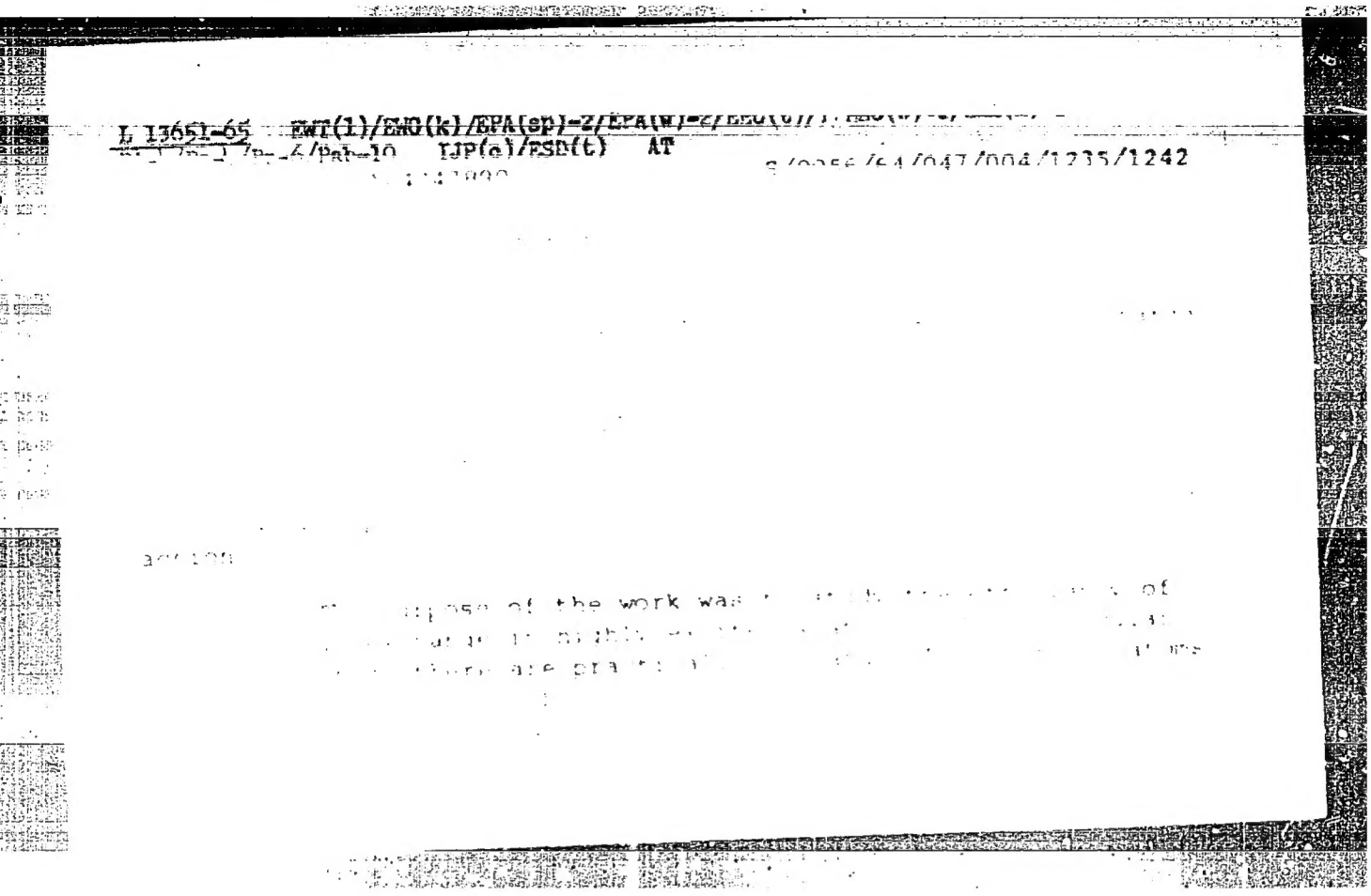

L 13651-65 EWT(1)/EWG(k)/EPA(sp)-2/EPA(w)-2/EEG(v)/[illegible]
[illegible]/Pab-10 IJP(c)/ESD(t) AT
[illegible] S/0056/64/047/004/1235/1242

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[illegible] highly [illegible]
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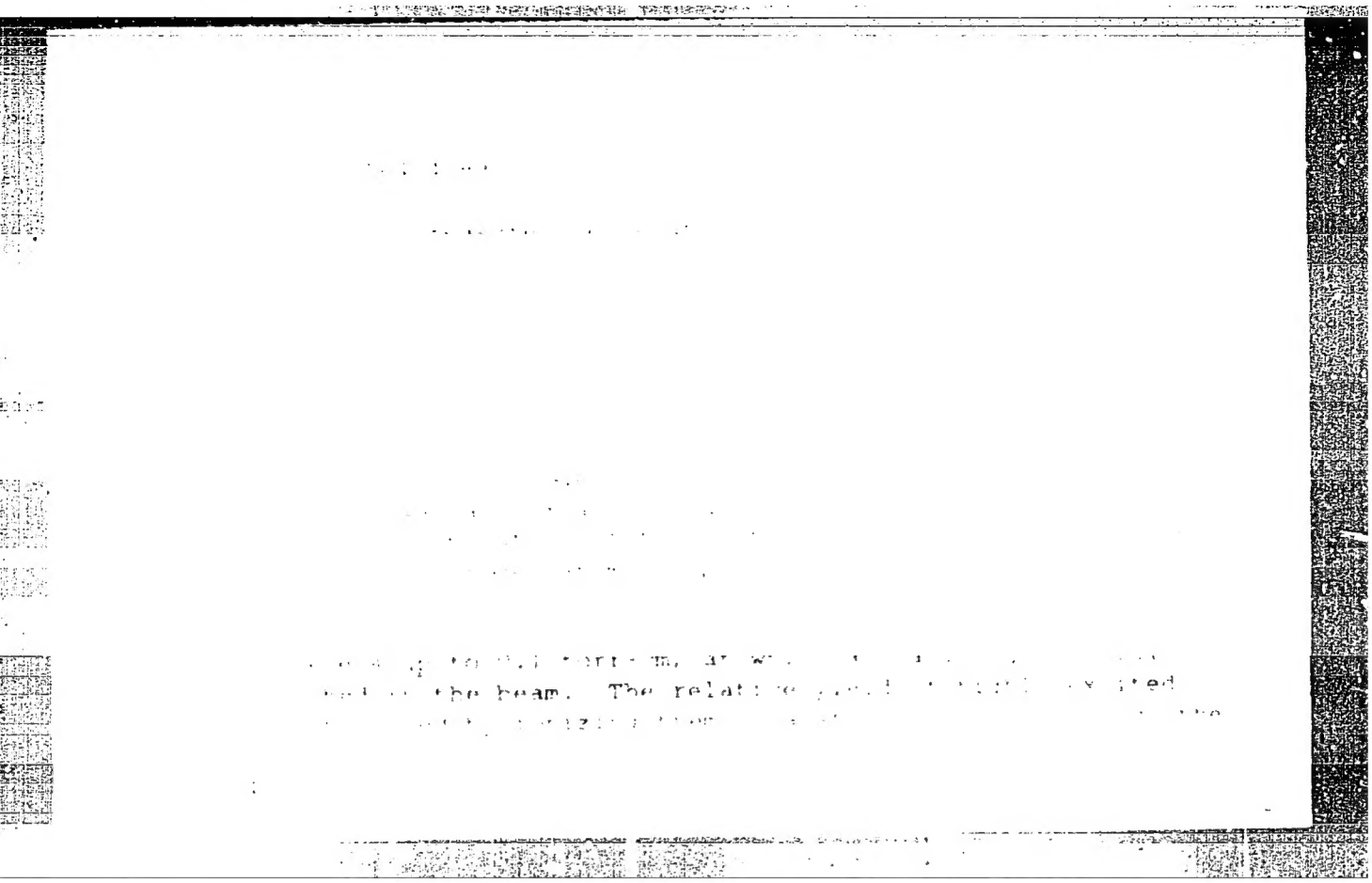

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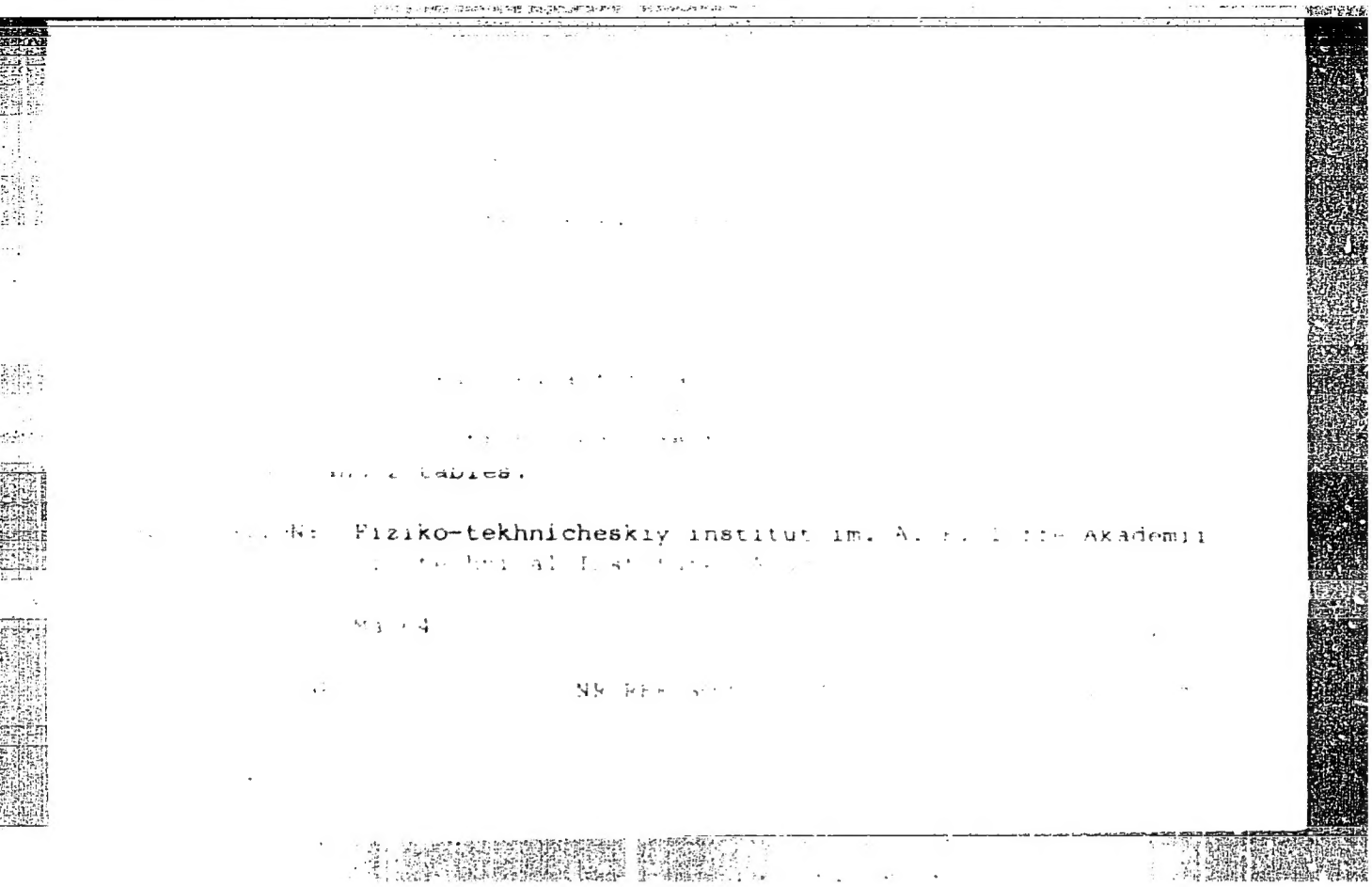

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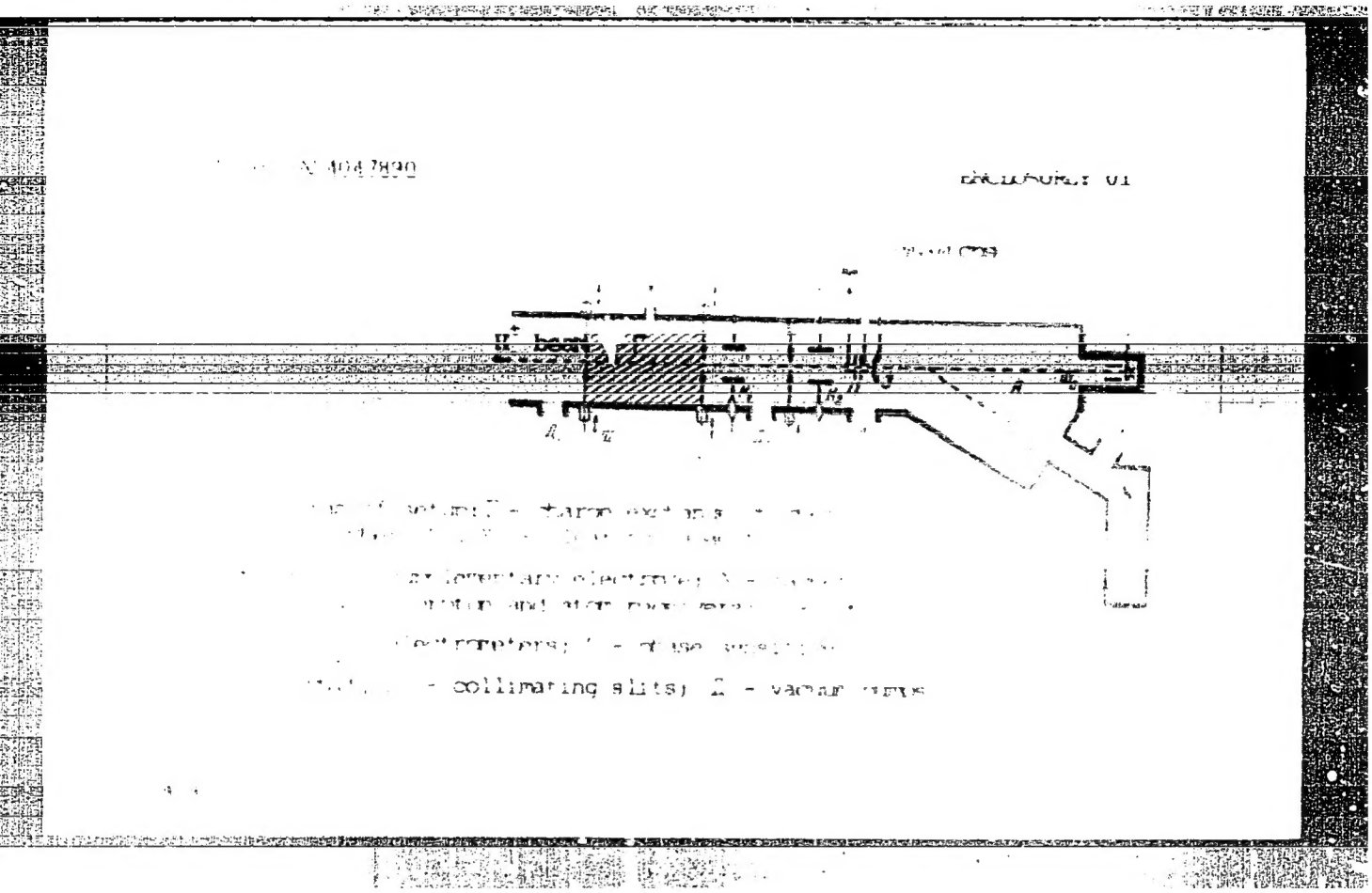

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

GINZBURG, Susanna Il'inichna; GLADYSHEVSKAYA, Klavdiya Antonovna; YEZERSKAYA, Natal'ya Anatol'yevna; IVONINA, Ol'ga Mikhaylovna; PROKOF'YEVA, Irina Vasil'yevna; FEDORENKO, Nina Vladimirovna; FEDOROVA, Aleksandra Nikolayevna; ZVYAGINTSEV, O.Ye., doktor khim. nauk, otv. red.; VOLYNETS, M.P., red.

[Manual on the chemical analysis of platinum metals and gold] Rukovodstvo po khimicheskomu analizu platinovykh metallov i zolota. Moskva, Nauka, 1965. 312 p.
(MIRA 18:2)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

L 9298-66 EWT(1)

ACC NR: AP5026412 SOURCE CODE: UR/0386/65/002/006/0291/0296

AUTHOR: Afrosimov, V. V.; Gordeyev, Yu. S.; Panov, M. N.; Fedorenko, N. V.

ORG: Physicotechnical Institute im. A. F. Ioffe, Academy of Sciences SSSR (Fiziko-tekhnicheskiy institut Akademii nauk SSSR)

TITLE: Ionization and scattering with characteristic energy losses in atomic collisions

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 6, 1965, 291-296

TOPIC TAGS: atomic physics, ionization, collision cross section, argon, krypton, neon

ABSTRACT: This is a continuation of an earlier investigation (ZhTF v. 34, 1613, 1624, and 1637, 1964) of the elementary acts of collisions between ions and argon atoms having kev energies at impact parameters smaller than the atomic dimensions, where it was found that the spectrum of the excess inelastic loss is not continuous, but consists of relatively narrow discrete lines, the energies of which do not depend on the shortest distance between the nuclei, on the relative velocity of the particles, or on the scheme of the elementary process by which the charge states are changed. To determine the extent to which the observed phenomenon is general, the authors investigated collisions between ions and atoms of different noble gases. The measured excess inelastic energy loss R* for the Ne^+ + Ar pair was found not to de-

Card 1/3

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ACC NR: AP5026412

pend on the scheme of the elementary process. Excitation of several R* lines was observed in the investigated interval of shortest distances between the nuclei of the colliding particles. The regions in which one R* line is excited, and the region where the transition occurs from excitation of one line to excitation of another, do not shift when the relative particle velocity changes. However, excitation of lines with different energies were observed when the velocities were different. Analogous results were obtained for $Kr^+ + Kr$ pair at 25 and 50 kev. In this case, three characteristic R* lines were observed in the interval 100--600 ev. For the $Ne^+ + Ne$ pair at 50 kev, one R* line with energy ~160 ev was observed. The authors investigated the connection between the excitation of the characteristic lines and the charges of the colliding particles. When like particles collide ("symmetrical" pairs $Ar^+ + Ar$, $Kr^+ + Kr$) this connection is manifest in a clear-cut correlation between the average charge of the scattered particles and the inelastic energy loss. No such correlation is observed when an "asymmetrical" pair is investigated ($Ne^+ + Ar$, energy 25 kev). The scattering of the colliding particles was also investiged in detail. It was found that the total differential scattering cross section is not, as heretofore assumed, a continuous function of the scattering angle, and singularities are observed when the measured cross sections are compared with the cross sections calculated for a continuously varying interaction potential. In the transition region, the experimental scattering cross sections differ most strongly from the calculated ones, with deviations in the form of maxima. The effect is observed for all the investigated pairs and suggests that the real interaction potential is not a continuous function

Card 2/3

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ACC NR: AP5026412

of the shortest distance, but changes abruptly on going from the excitation of one characteristic line to the excitation of another. It is difficult at present to present an unambiguous interpretation of the observed effects. The explanation offered earlier, based on the assumption that vacancies are produced in the inner shells of the colliding particles and are followed by Auger transitions, in in poor agreement with the experimental data, as are other hypotheses. Authors thank M. Ya. Amus'ya for a discussion of the results and A. P. Shergin and Z. Z. Latypov for help with some of the measurements. Orig. art. has: 3 figures. 44,55

SUB CODE: 20/ SUBM DATE: 29Jul65/ ORIG REF: 002/ OTH REF: 004 44,55

44,55

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

A 9813-66 EWT(m)/T/EWP(t)/EWP(b)/EWA(m)-2 LJP(c) JD/JG

ACC NR: AP5027990 SOURCE CODE: UR/0386/65/002/007/0310/0314

AUTHOR: Il'in, R. N.; Oparin, V. A.; Solov'yev, Ye. S.; Fedorenko, N. V.

ORG: Physicotechnical Institute im. A. F. Ioffe Academy of Sciences SSSR (Fiziko-tekhnicheskiy institut Akademii nauk SSSR)

TITLE: Charge exchange of protons in alkaline metal vapor with formation of highly excited hydrogen atoms

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. (Prilozheniye), v. 2, no. 7, 1965, 310-314

TOPIC TAGS: proton, charge exchange, alkali metal, hydrogen, excited state

ABSTRACT: The charge exchange of 10--180 kev protons in vapor of Li, Na, K, Cs, and Mg was investigated with an aim at using this process to obtain highly excited hydrogen atoms. An atomic beam, obtained by charge exchange of the protons in the vapor of these metals and purified to eliminate the charged particles, was fed into a region with strong electric field, of intensity E < 160 kv/cm. The ratio of the current of the secondary protons, produced upon ionization of the highly excited atoms in the field E, to the total current of the atoms I(E) was measured. This ratio characterizes the relative charge-exchange yield of the highly excited atoms. The total cross section for proton charge exchange and the ratio of the total number of atoms produced by charge exchange to the number of protons in the primary beam were also measured in individual experiments. These made it possible in turn to determine the cross section for the charge exchange accompanied by production of highly excited

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ACC NR: AP5027990

atoms. Plots of the cross sections against proton energy are presented both for metallic targets and (for comparison) for He, Ne, Ar, and H_2. The plots show that the cross sections for alkaline metals and for magnesium above 15 kev decrease with increasing energy. A characteristic kink was observed for both cross sections in the region 30--70 kev, beyond which the decrease of the cross sections slows down. The presence of the kink on the curves can be attributed to the fact that at low energies the outer weakly-bound electron of the metal atom takes part in the charge exchange, while at high energies a greater role is played by charge exchange with participation of the electrons from the filled shell, analogous to the outer shell of an inert gas. The latter is confirmed by the similarity of the plots for the alkaline metals and magnesium and the similar plots for inert gases at high energies. The main conclusion of the investigation is that vapors of alkaline and alkali-earth metals are more suitable targets for the production of highly excited atoms of hydrogen at energies below 50 kev, and that molecular hydrogen and inert gases are preferable at higher energies. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 26Jul65/ ORIG REF: 002/ OTH REF: 002

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, N.V.; IVANOVA, T.I.

Extraction of rhodium and iridium from hydrochloric acid solutions with n-trioctylamine. Zhur. neorg. khim. 10 no.3: 721-723 Mr '65. (MIRA 18:7)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

L 01217-66 EWT(l)/EWT(m)/EWP(b)/EWP(t) JP(c) JD/JG

ACCESSION NR: AP5021095 UR/0056/65/049/002/0379/0385

AUTHOR: Kikiani, B. I.; Ogurtsov, G. N.; Fedorenko, N. V.; Flaks, I. P.

TITLE: Ionization produced during collisions of alkali metal atoms with gas molecules

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 2, 1965, 379-385

TOPIC TAGS: collision, collision cross section, gas ionization, alkali metal, atom

ABSTRACT: The results are presented of extensive investigations of ionizing collisions between Li, Na, K, and Cs fast atoms and He, Ne, Ar, Kr, and Xe atoms and H_2 and N_2 molecules. The study was performed in the 3—30 kev energy range. The average results of independent measurements are presented in a table which gives the cross sections of free electron production and of ionization and stripping cross sections. When possible, the data obtained were compared with those of other authors. A comparison of ionization cross sections of gases with stripping cross sections of alkali metal atoms showed in many cases the prevalence of ionization events. It is stressed, however, that in the interactions of alkali metal molecules with the molecules of H_2 and N_2, the stripping cross sections prevailed over the ionization cross sections of the molecules in the whole range of energies. This

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ACCESSION NR: AP5021095

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difference was most marked in Li-H_2 and Na-H_2 collisions, i.e., in the collisions of the lightest particles. As a rule, the ionization cross sections showed a continuous increase with the increasing velocity of the colliding particles. At a given velocity, the cross sections increased with the increasing atomic numbers of the particles. Here, however, an exception was observed for pairs with close values of their atomic numbers (e.g., Li-He, Na-Ne, K-Ar, Cs-Xe). The authors feel that their work may be useful in the corpuscular diagnosis of plasmas, and in the study of ionic engines, astrophysics, and mass-spectrometry. Orig. art. has: 3 figures, 1 table, and 3 formulas. [ZL]

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe Akademii nauk SSSR (Physicotechnical Institute, Academy of Sciences, SSSR)

44,55

SUBMITTED: 23Feb65 ENCL: 00 SUB CODE: NP

NO REF SOV: 007 OTHER: 005 ATD PRESS: 4098

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

L 21710-66 EWT(1) AT

ACC NR: AP6004887 SOURCE CODE: UR/0057/66/036/001/0123/0131

63
60
B

AUTHOR: Afrosimov,V.V.; Gordeyev,Yu.S.; Panov,M.N.; Fedorenko,N.V.

ORG: Physicotechnical Institute im. A.F.Ioffe, AN SSSR, Leningrad (Fiziko-tekhnicheskiy institut AN SSSR)

21,44,55 21,44,55 21,44,55

TITLE: Ionization and scattering with characteristic energy losses in atomic collisions

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 1, 1966, 123-131

TOPIC TAGS: ionization, inelastic scattering, argon, neon, krypton, excitation energy, particle collision, ion energy

ABSTRACT: The characteristic inelastic energy losses (energies carried off by electrons and radiation), previously investigated in Ar^+-Ar collisions by the present authors (Compt. Rend. de la VI-e Conf. Int. Phen. d'Ionisat. dans les Gas, eds. SERMA, 1, 111, Paris, 1963; ZhTF 34, 1613, 1964; ZhTF, 34, 1624, 1964; ZhTF, 34, 1637, 1964) and confirmed by E.Everhart et al (Phys. Rev. Lett., 14, 247, 1965; Phys. Rev. Lett., 14, 484, 1965), have been further investigated in Ne^+-Ne, Ar^+-Ar, Kr^+-Kr, and Ne^+-Ar collisions at incident ion energies of 12, 25, and 50 keV, using the apparatus and techniques described in the earlier papers. Characteristic inelastic energy loss "lines" were observed in all the investigated systems. The probabilities for "excitation" of the different "lines" (occurrence of the different characteristic energy

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losses) were nearly independent of the incident ion energy but depended strongly on the distance of closest approach; the positions of the lines, however, did depend somewhat on the incident ion energy. The curves representing the composition with respect to charge of the scattered particles as a function of scattering angle revealed regions of slow and rapid change associated with excitation of the different characteristic lines, and the differential cross section deviated from a smooth curve at scattering angles associated with excitation of the characteristic lines. There was no simple relation between the characteristic lines excited in Ne^+-Ar collisions and those excited in Ne^+-Ne and Ar^+-Ar collisions; from this it is concluded that the lines are not to be ascribed to excitation of any energy levels characteristic of the isolated atoms. Difficulties are pointed out that are encountered in attempts, including the attempt of U.Fano and W.Lichten (Phys. Rev. Lett., 14, 627, 1965), to account for the experimental results by invoking Auger transitions. The authors argue in favor of their earlier hypothesis involving excitation of collective vibrations of the electron shells. The authors thank M.Ya.Amus'ya for valuable discussions, and A.P.Shergin and Z.Z.Latypov for participating in the work. Orig. art. has: 7 figures.

SUB CODE: 20/ SUBM DATE: 05Aug65/ ORIG REF: 002/ OTH REF: 008

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

L 02273-67 EWT(l)/EWT(m)/EWP(t)/ETI IJP(c) JD/WW/JG/AT

ACC NR: AP6025252 SOURCE CODE: UR/0057/66/036/007/1241/1250

AUTHOR: Il'in, R.N.; Oparin,V.A.; Solov'yev,Ye.S.; Fedorenko,N.V.

ORG: Physicotechnical Institute im. A.F.Ioffe, AN SSSR, Leningrad (Fiziko-tekhnicheskiy institut)

TITLE: Electron attachment to protons in alkali mekal vapors with the formation of highly excited hydrogen atoms

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 7, 1241-1250 1966

TOPIC TAGS: proton, charge exchange, gas target, atom, excited state, alkali metal, inert gas, hydrogen, carbon dioxide, plasma injection,

ABSTRACT: The authors have measured the cross sections of Li, Na, K, Cs, He, Ne, Ar, and H_2 for the electron attachment reaction of 10 to 180 keV protons with particular attention to the cross sections for production of highly excited hydrogen atoms. The measurements were undertaken because of their interest in connection with injection of plasma into magnetic traps. The beam, initially of protons, successively traversed the 12 cm long heated target chamber, a weak transverse electric field which removed the charged particles, a strong (up to 160 kV/cm) electric field which ionized the highly excited atoms, and a magnetic field which separated the ions from the remaining neutral atoms. The neutral atoms were recorded with a secondary emission detector

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which was calibrated against a calorimeter. The alkali metals were introduced directly into the target chamber, and the pressure of the vapor target was determined from the temperature of the chamber. Thin target data were obtained for all the target materials, and [illegible] data were obtained for Na and Ne and, at some values of the incident proton energy, for K, Cs, and CO2. The results are presented graphically and in tabular form; they are discussed at some length and are compared with theoretical calculations and with data of other investigators. It is concluded that at incident proton energies up to 30 keV the alkali metal vapors are efficient targets for producing both highly excited and moderately or unexcited hydrogen atoms, but that at higher proton energies the inert gas and H_2 targets are more effective for producing highly excited atoms. The authors thank Yu.N.Demkov for discussing the results. Orig. art. has: 7 formulas, 7 figures, and 3 tables.

SUB CODE: 20 SUBM DATE: 05Aug65 ORIG. REF: 006 OTH REF: 013

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, N.Ya. (Khar'kov).

Description of continous production of doubly distilled water. Apt.delo 2 no.5:50 S-O '53. (MLRA 6:10)

(Water, Distilled)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, N.Ya.

Protecting distilled water from pollution. Apt. delo 5 no.1:43 Ja-F '56 (MLRA 9:5)

(WATER, DISTILLED)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, N.Ya.

Work of the central district pharmacies in Kharkov Province.
Apt. delo 14 no.5:77-78 S-O '65. (MIRA 18:11)

1. Khar'kovskoye oblastnoye aptechnoye upravleniye.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, O.A.

Paleogeography and the history of the geological development of the eastern Kyzyl Kum during the Cretaceous. Nauch. trudy TashGU no.251. Trudy Nauch.-issl. otd. Geog. fak. no.3:109-114 '64. (MIRA 18:3)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

NIKOLAYEV, A.; FEDORENKO, P.; SHATILOV, N.

Innovators of the Novokramatorsk Machinery Plant save millions for the national economy. Izobr.i rats. no.2:4-5 F '61. (MIRA 14:2)

(Kramatorsk—Machinery industry)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, P.I., inzh.; MIKITIN, I.P., inzh.; DREBNITSA, A.V., inzh.; GAGAUZ, F.G., inzh.

Relationship between blasting operations and the productivity of scraper haulage in systems with caving. Vzryv. delo no. 51/8:288-293 '63. (MIRA 16:6)

1. Institut gornogo dela AN UkrSSR.
(Krivoy Rog Basin—Blasting) (Mine haulage)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

GAGAUZ, F.G., inzh.; NIKITIN, I.P., inzh.; FEDORENKO, P.I., inzh.; CHERNETSOV, V.M.; KUPRIK, N.F., tekhnik

Practice of carrying out blasting operations in drifting at the K. Libknekht Mine. Vzryv. delo no.51/8:295-299 '63. (MIRA 16:6)

1. Krivorozhskiy filial Instituta gornogo dela AN UkrSSR (for Gagauz, Nikitin, Fedorenko). 2. Rudoupravleniye imeni K. Libknekhta (for Chernetsov, Kuprik).

(Krivoy Rog Basin—Blasting)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, P.I., gornyy inzh.; DROBNITSA, V.F., gornyy inzh.; DREBNITSA, A.V., gornyy inzh.; VEKSEL'MAN, V.M.; KASHEL', N.Ya.

Using short-delay blasting to crush rocks in the Dzerzhinskiy and Kirov Mines. Vzryv. delo no.53/10:207- 214 '63. (MIRA 16:8)

1. Krivorozhskiy filial Instituta gornogo dela AN UkrSSR (for Fedorenko, Drobnitsa, Drebnitsa). 2. Rudnik im. Kirova (for Veksel'man). 3. Rudnik im. Dzerzhinskogo (for Kashel').
(Krivoy Rog Basin--Blasting)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

MALAKHOV, G.M., doktor tekhn.nauk; BEZUKH, V.R., inzh.; KUZ'MICH, S.N., inzh.; FEDORENKO, P.I., inzh.; IVANOV, Yu.A., inzh.

Effect of the depth of mining on the efficiency of the chamber system. Met. i gornorud. prom. no.3:39-42 My-Je '63. (MIRA 17:1)

1. Krivorozhskiy gornorudnyy institut.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

KASHEL', N.Ya., gornyy inzh.; FEDORENKO, P.I., gornyy inzh.; KUZ'MICH, S.N., gornyy inzh.

Results of industrial testing of charges with air spaces in the "Dzerzhinsk" Mine. Vzryv. delo no.54/11:379-383 '64. (MIRA 17:9)

1. Rudnik imeni Dzerzhinskogo (for Kashel'). 2. Krivorozhskiy gornorudnyy institut (for Fedorenko, Kuz'mich).

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

SADOVOY, I.P., inzh.; FEDORENKO, P.I.

Using short-delay blasting of chamber charges at the Frunze Mine. Vzryv. delo no.55/12:227-230 '64. (MIRA 17:10)

1. Krivorozhskiy gornorudnyy institut.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, P. N.

"The Problem of Reflex Regulation of the Morphological Composition of the Blood." Cand Med Sci, Kazan' State Medical Inst, Kazan', 1954. (KL, No 10, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, Pavel Konstantinovich; YATSUNSKIY, V.K., otv.red.; DUBOVIKOVA, G.F., red.izd-va; LEBEDEVA, L.A., tekhn.red.

[Small iron processing plants on the left bank of the Dnieper in the Ukraine, in the 17th-18th centuries] Rudni levoberezhnoi Ukrainy v XVII-XVIII vv. Moskva, Izd-vo Akad.nauk SSSR, 1960. 261 p. (MIRA 13:9)

(Dnieper Valley--Ironwork)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

REZNIK, A.Ye., dotsent; BAYTERYAKOVA, N.R., assistent; ODNILEVSKAYA, N.N., assistent; FEDORENKO, P.N., assistent; DAVYDOV, V.Ya., assistent; YENALEYEVA, D.Sh., ordinator; GRUNIS, L.P., ordinator; RAFIKOVA, K.A., ordinator; IBRAGIMOVA, A.M.

Clinical features of the influenza outbreak in Kazan in October 1957. Kaz.med.zhur. 40 no.1:34-37 Ja-F '59. (MIRA 12:10)

1. Iz kliniki infektsionnykh bolezney (zav. - dotsent A.Ye. Reznik) Kazanskogo meditsinskogo instituta.
(KAZAN--INFLUENZA)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, P.N.

Effect of autosensitization on some functional parameters of the liver. Nauch. trudy Kaz. gos. med. inst. 14:305-306 '64. (MIRA 18:9)

1. Kafedra infektsionnykh bolezney (zav. - doktor med. nauk A.Ye.Reznik) i kafedra patologicheskoy fiziologii (zav. - prof. M.A.Yerzin) Kazanskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, Petr Sidorovich; GRINSHPON, Z.D.; CHUPAK, I.S., red.

[Organizing the accounting for and calculation of stock-farm production] Organizatsiia ucheta i kal'kulirovanie produktsii skotootkormochnykh khoziaistv. Kiev, Gosel'khozizdat USSR, 1963. 205 p. (MIRA 18:1)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

BRAGINSKIY, S. I., GEL'FAND, I. M. and FEDORENKO, R. P.

"The Theory of the Compression and Pulsation of a Plasma Column in a Strong Pulse Discharge," (Work carried out 1957-58); pp. 201-221.

"The Physics of Plasmas; Problems of Controlled Thermonuclear Reactions." Vol. IV. 1958, published by Inst. Atomic Energy, Acad. Sci. USSR.
Resp. ed. M. A. Leontovich, editorial work V. I. Kogan.

Available in Library.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, R.P. (Moskva)

Iterative method for solving elliptic difference equations.
Zhur. vych. mat. i mat. fiz. 1 no.5:922-927 S-O '61.
(MIRA 14:10)

(Difference equations)
(Approximate computation)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, R.P. (Moskva)

Use of high-precision difference systems for the numerical solution of hyperbolic equations. Zhur.vych.mat.i mat.fiz. 2 no.6:1122-1128 N-D '62. (MIRA 15:11)
(Differential equations—Numerical solutions)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

ACCESSION NR: AP4037261 S/0208/64/004/003/0559/0564

AUTHOR: Fedorenko, R. P. (Moscow)

TITLE: Convergence rate of an iteration process

SOURCE: Zhurnal vy*chislitel'noy matematiki i matematicheskoy fiziki, v. 4, no. 3, 1964, 559-564

TOPIC TAGS: convergence rate, iteration process, linear elliptic equation, convergence acceleration, difference operator, linear algebraic equation

ABSTRACT: The author studies the equation

$$\frac{\partial^2 u}{\partial x^2}+\frac{\partial^2 u}{\partial y^2}=f \qquad (1)$$

in the square $0 \leq x \leq \pi$; $0 \leq y \leq \pi$ with zero boundary conditions. He introduces the lattice $x_i = ih$, $y_j = jh$; $i,j = 0,1,\ldots,N$ and defines the difference operators

$$\left.\begin{aligned}(\Delta_1 u)_{i,j} &= u_{i-1,j} - 2u_{i,j} + u_{i+1,j},\\ (\Delta_2 u)_{i,j} &= u_{i,j-1} - 2u_{i,j} + u_{i,j+1}.\end{aligned}\right\} \quad (i,j = 1,2,\ldots,N-1); \qquad (2)$$

He passes to a system of linear algebraic equations

Card 1/2

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ACCESSION NR: AP4037261

$$\frac{1}{h^2}(\Delta_1 u)_{i,j} + \frac{1}{h^2}(\Delta_2 u)_{i,j} = f_{i,j}, \qquad (3)$$

or

$$\Delta u \equiv (\Delta_1 + \Delta_2)\, u = h^2 f, \qquad (4)$$

and estimates the quality of an iterative method of solution. He obtains an estimate for the rate of convergence of the iterations under rather special assumptions which were needed to avoid otherwise complicated estimates. Thus, his result is not a complete proof but is a serious reason for using a good iteration method obtained in this fashion. Orig. art. has: 4 formulas.

ASSOCIATION: none

SUBMITTED: 10May63 DATE ACQ: 09Jun64 ENCL: 00

SUB CODE: MA NO REF SOV: 002 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

[illegible]

[illegible] Vasenkova, [illegible]

TITLE: Optimum regime for reactor shutdown 19

SOURCE: Atomnaya energiya, v. 17, no. 3, 1964, 189-193

[illegible] Fedorenko optimum control method, reactor optimum con- [illegible] reactor, reactor poisoning, reactor shutdown

[illegible] A procedure is described for calculating the optimum re- [illegible] employing Fedorenko's [illegible] method [illegible]

[illegible] that the concentration of fission [illegible] [illegible]

[illegible]

[illegible]

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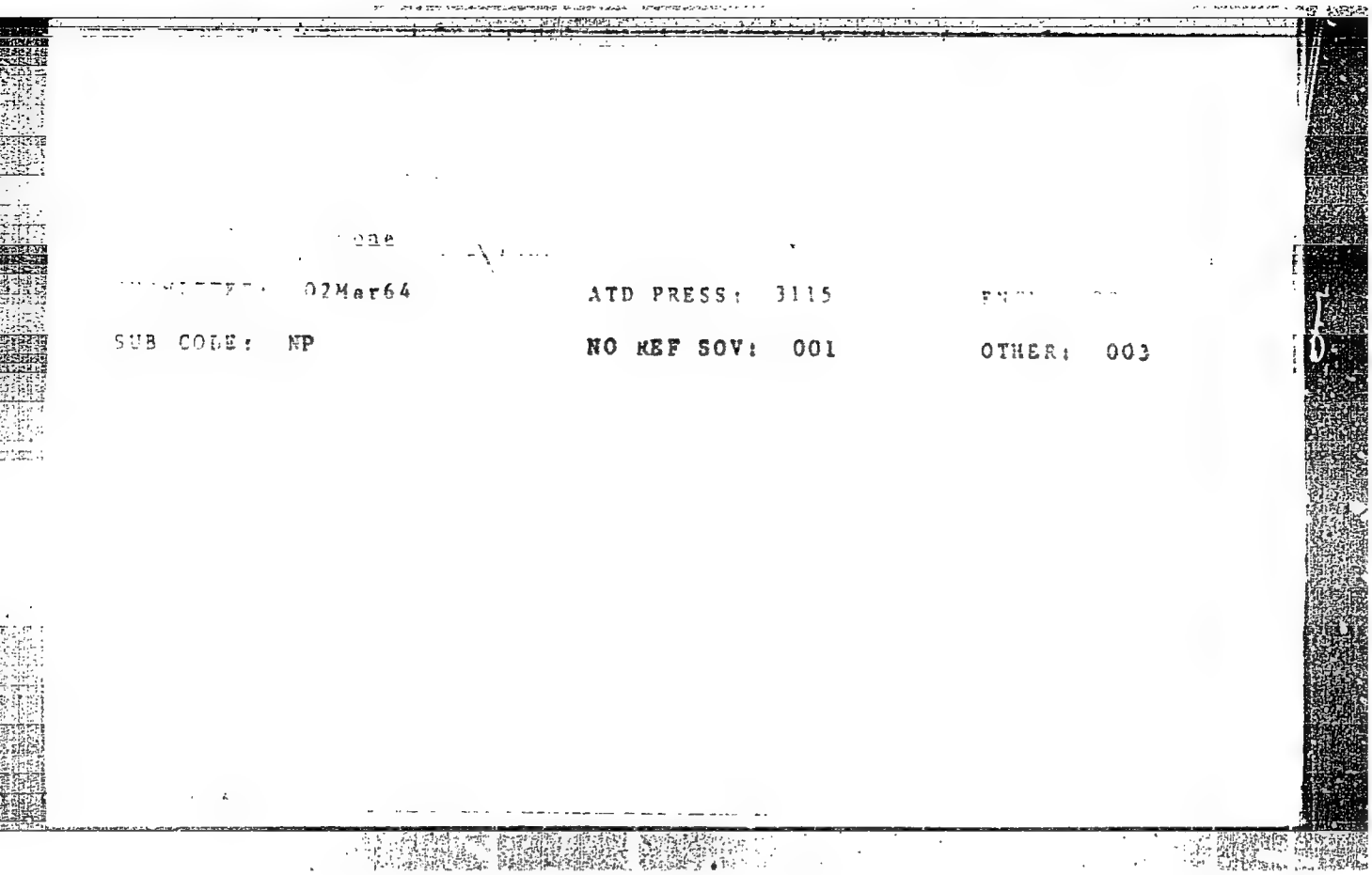

ATD PRESS: 3115

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SUB CODE: NP NO REF SOV: 001 OTHER: 003

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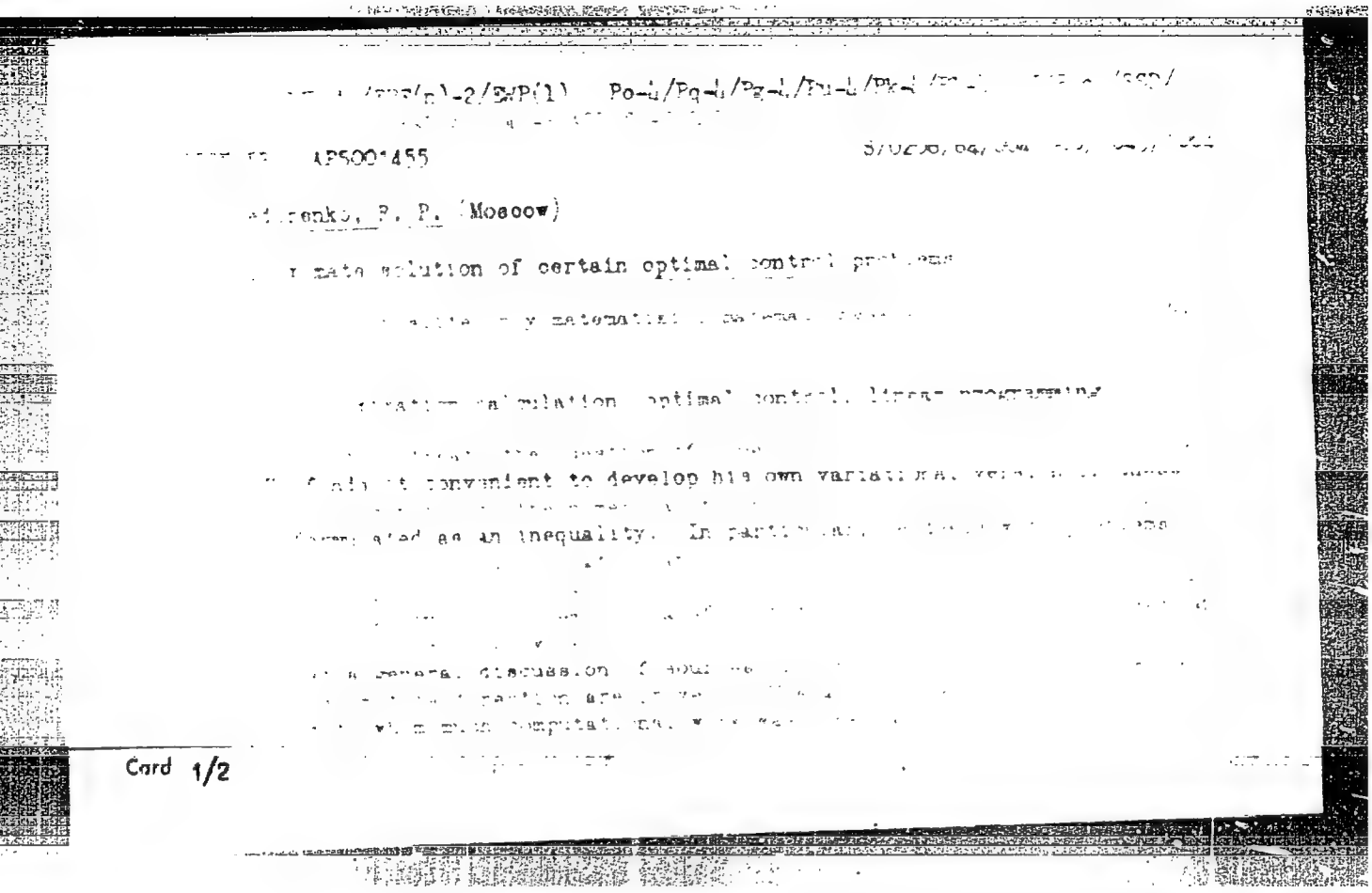

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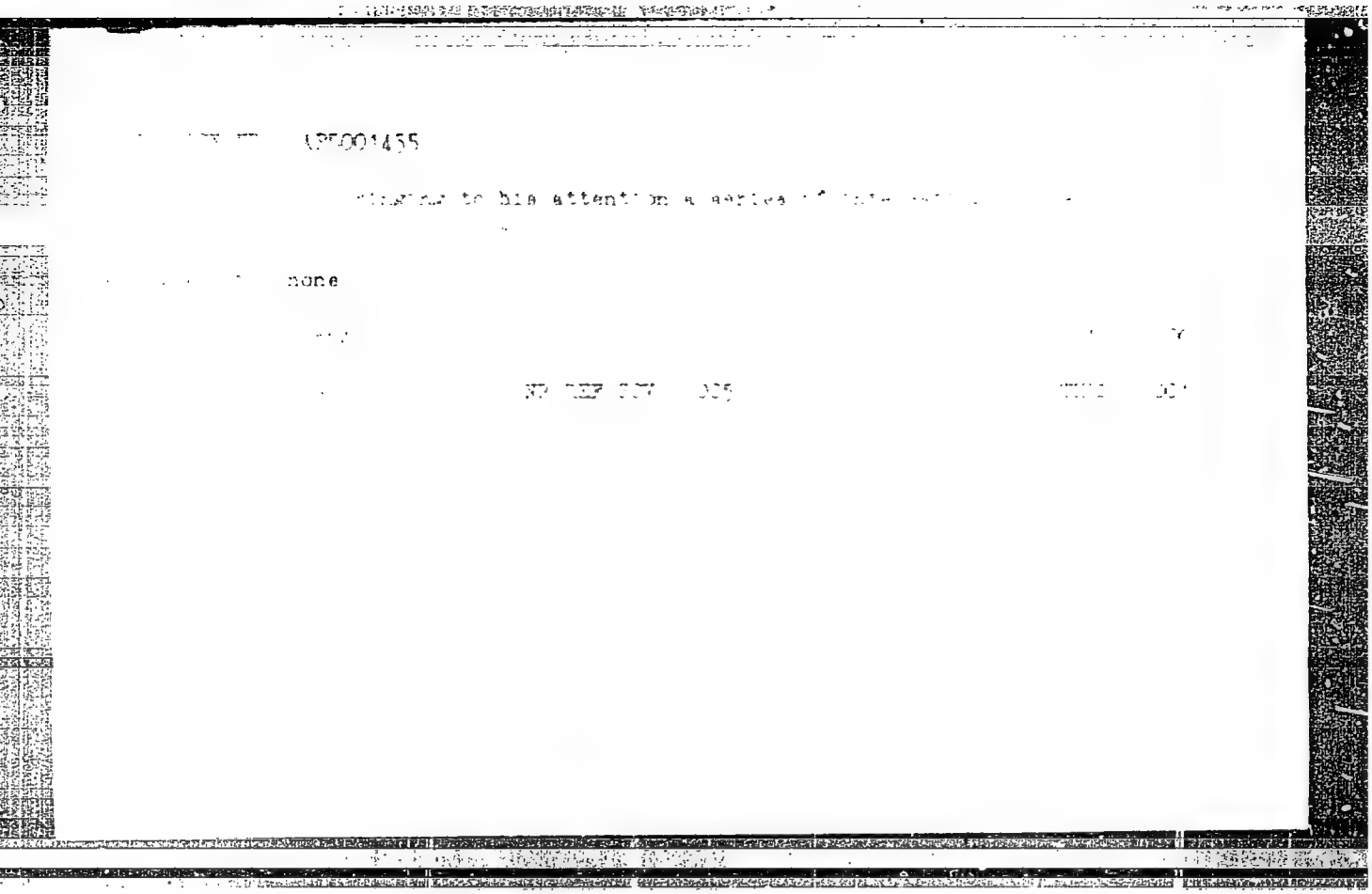

none

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

ARTAMKIN, V.N.; VASHENKOVA, [illegible]; [illegible]

Optimum conditions for reactor shutdown. [illegible]
no.3:189-193 S '64.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, R.P. (Moskva)

Experience gained in the iterative solution of linear programming problems. Zhur. vych. mat. i mat. fiz. 5 no.4:709-717 Jl-Ag '65. (MIRA 18:8)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

L 05053-67 EWT(m) JR/GD
ACC NR: AT6027917 SOURCE CODE: UR/0000/66/000/000/0005/0021

AUTHOR: Orlov, V. V.; Abagyan, A. A.; Fedorenko, R. P.; Dubinin, A. A.; Suvorov, A. P.

45
B+1

ORG: None

TITLE: Optimizing the physical characteristics of radiation shielding 19

SOURCE: Voprosy fiziki zashchity reaktorov (Problems in physics of reactor shielding); sbornik statey, no. 2. Moscow, Atomizdat, 1966, 5-21

TOPIC TAGS: radiation shielding, variational problem, successive approximation, perturbation theory, REACTOR SHIELDING

ABSTRACT: The authors consider the problem of selecting the ratio of components in reactor shielding to give minimum weight or overall dimensions for a given reduction in radiation intensity or to achieve a minimum radiation dose for given shielding weight or dimensions. The problem is formulated as a variational problem on the optimum of some quantity when given conditions are imposed on other quantities. The various approaches to solution of the problem given in the literature are briefly reviewed. The physical characteristics of the shielding (neutron and gamma doses, heat release, weight, etc.) are considered within the framework of perturbation theory and the concept of functions of effectiveness of shielding materials is intro-

Card 1/2

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L 05053-67

ACC NR: AT6027917 O

duced, i. e. functions which give information on the changes in various quantities under given conditions which result from some small change in the densities of the materials. The classical methods of variational calculus are used for determining optimum conditions for functionals representing the various physical characteristics of the shielding. The method of successive approximations is used for solving the problem of optimizing the distribution of shielding components in the general case. An example is given illustrating application of the proposed method. Orig. art. has: 9 figures, 31 formulas.

SUB CODE: 18/ SUBM DATE: 12Jan66/ ORIG REF: 014/ OTH REF: 002

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APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

L 10470-67 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWT(l)

ACC NR: AP6018637 SOURCE CODE: UR/0208/66/006/003/0578/0581

30

AUTHOR: Fedorenko, R. P. (Moscow)

26

ORG: none

TITLE: A special optimum control problem

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 6, no. 3, 1966, 578-581

TOPIC TAGS: control theory, automatic control theory, optimal control

ABSTRACT: A description of a special optimum control problem is presented. This description is based on the formal modification of a scheme proposed by L. S. Pontryagin i dr. (Matematicheskaya teoriya optimal'nykh protsessov. M., Fizmatgiz, 1961). The final form of the derived expression assumes the form

$$\delta I = \frac{\partial \Phi}{\partial \mu}\delta\mu + \int_{t_0}^{t_1} (Z, \delta u)\,dt, \quad Z(t) = M^*(t)\psi(t) + \beta Z_1(t),$$

where

$$\beta = \int_{t_0}^{t_1} (\psi, Qx^{(0)})\,dt.$$

Card 1/2 UDC: 51:62-50

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

L 10470-67

ACC NR: AP6018637

The meaning of the symbols is the same as in the reference above. This work was undertaken as a result of the author's discussion of certain applied problems with F. P. Raskach, A. A. Akimov, V. N. Artemkin, and A. P. [illegible]. Orig. art. has: 12 equations.

SUB CODE: 12/09/ SUBM DATE: 06Jul65/ ORIG REF: 004

Card 2/2 egk

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, S.

"The Effect of Pine Tappings on the Life of the Plantings." Cand Agr Sci, Khar'kov Agricultural Inst, Khar'kov, 1953. (RZhBiol, No 6, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, S.

Work organization of the laboratory at the Kakhovka station of the Grain Procurement Agency. Muk.-elev.prom. 20 no.7:28-29 Jl '54. (MLRA 7:8)

1. Kakhovskiy zagotovitel'nyy punkt Khersonskoy oblasti.
(Grain trade)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, S.

The mechanization of work at granaries has reached 95%. Muk.-elev. prom. 20 no.3:31 Mr '54. (MLRA 7:7)

1. Kakhovskiy zagotovitel'nyy punkt.
(Grain--Storage)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, S.

Educational role of workers' meetings. Sov. profsoiuzy 5 no.4:70-71 Ap '57. (MLRA 10:6)

1. Predsedatel' mestnogo komiteta profsoyuza Kakhovskogo khleboprieмnogo punkta "Zagotzerno".
(Personnel management)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, S.

Mechanization of a grain-receiving station. NTO 2 no.1:25 Ja '60. (MIRA 13:5)

1. Uchenyy sekretar' soveta pervichnoy organizatsii Nauchno-tekhnicheskogo obshchestva khlebopriyemnogo punkta, g.Kakhovka.
(Kakhovka--Grain--Storage)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, S., ekonomist

Achievements of the workers of the Kakhovka Plant for Processing Hybrid and Certified Corn. Muk.-elev. prom. 27 no.4:5-8 Ap '61. (MIRA 14:7)

1. Kakhovskiy zavod po obrabotke gibridnykh i sortovykh semyan kukuruzy.

(Corn (Maize))

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, S.

Enthusiasts of a useful business. NTO 6 no.3:32-33 Mr '64.
(MIRA 17:6)

1. Uchenyy sekretar' soveta Nauchno-tekhnicheskogo obshchestva Kakhovskogo zavoda po obrabotke semyan kukuruzy.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

COUNTRY : USSR
CATEGORY : Forestry. FOREST CULTURES.

ABS. JOUR. : Ref Zhur-Biologiya, No.1. 1959, No. 1508

AUTHOR : Fedorenko, S.I.
INST. :
TITLE : State Forest Shelter Belt of Belgorod-Don.

ORIG. PUB. : Lesn. kh-vo, 1958, No.5, 5-9

ABSTRACT : No abstract

CARD: 1/1

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, S.I., otv. za vypusk

[Summaries of reports of the Scientific Conference on Reclamation of the Lower Dnieper Sands, Kherson, 1960] Tezisy dokladov Nauchno-konferentsii po osvoeniiu Nizhnedneprovskikh peskov, Kherson, 1960. Khar'kov, Ukrainskii nauchno-issl. in-t lesnogo khoz. i agrolesomelioratsii, 1960. 103 p. (MIRA 14:9)

1. Nauchnaya konferentsiya po osvoyeniyu Nizhnedneprovskikh peskov, Kherson, 1960.
(Dnieper Valley—Reclamation of land)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, S.I., otv. red.; BYALLOVICH, Yu.P., nauchnyy sotr., red.; VOROB'YEV, D.V., red.; IZYUMSKIY, P.P., nauchnyy sotr., red.; KOBEZSKIY, M.D., red.; KUCHERYAVYKH, Ye.G., red.; LAVRINENKO, D.D., red.; NEDASHKOVSKIY, A.N., red.; PYATNITSKIY, S.S., red.; SAKHAROV, N.P., red.; SHCHEPOT'YEV, F.L., red.; MASLOBOYSHCHIKOVA, A.S., red.; POTOTSKAYA, L.A., tekhn. red.

[Sheltered zone of the Dnieper] Zashchitnaia zona Dnepra. Kiev, Izd-vo UASKhN, 1962. 191 p. (MIRA 16:4)

1. Kharkov. Ukrains'kyi naukovo-doslidchyi instytut lisovoho hospodarstva i agrolisomelioratsii. 2. Ukrainskiy nauchno-issledovatel'skiy institut lesnogo khozyaystva i agrolesomelioratsii (for Byallovich, Lavrinenko, Izyumskiy).
(Dnieper Valley--Windbreaks, shelterbelts, etc.)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, S.I.

Marine terrance of the east coast of Kamchatka. Biul. MOIP. Otd. geol. 40 no.4:80-90 Jl-Ag '65. (MIRA 18:9)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, S. M.

PA 61T85

USSR/Mines and Mining
Mining Machinery
Coal

Jan 1948

"Results of the Test Use of a Scraper Conveyer at Anthracite Shafts," S. M. Fedorenko, Chief Engr Shaft No 18 imeni Stalin, GnezhnyanAntratsit Trust, 1½ pp

"Ugol'" No 1 (262)

Scraper conveyer, installed at shaft 18 to determine its operation, yielded favorable results. Author discusses advantages in using this type of conveyer. Attractive features of this new equipment are simple construction and continuity of operation. On the average this apparatus is capable of operating continually for 2½ months.

61T85

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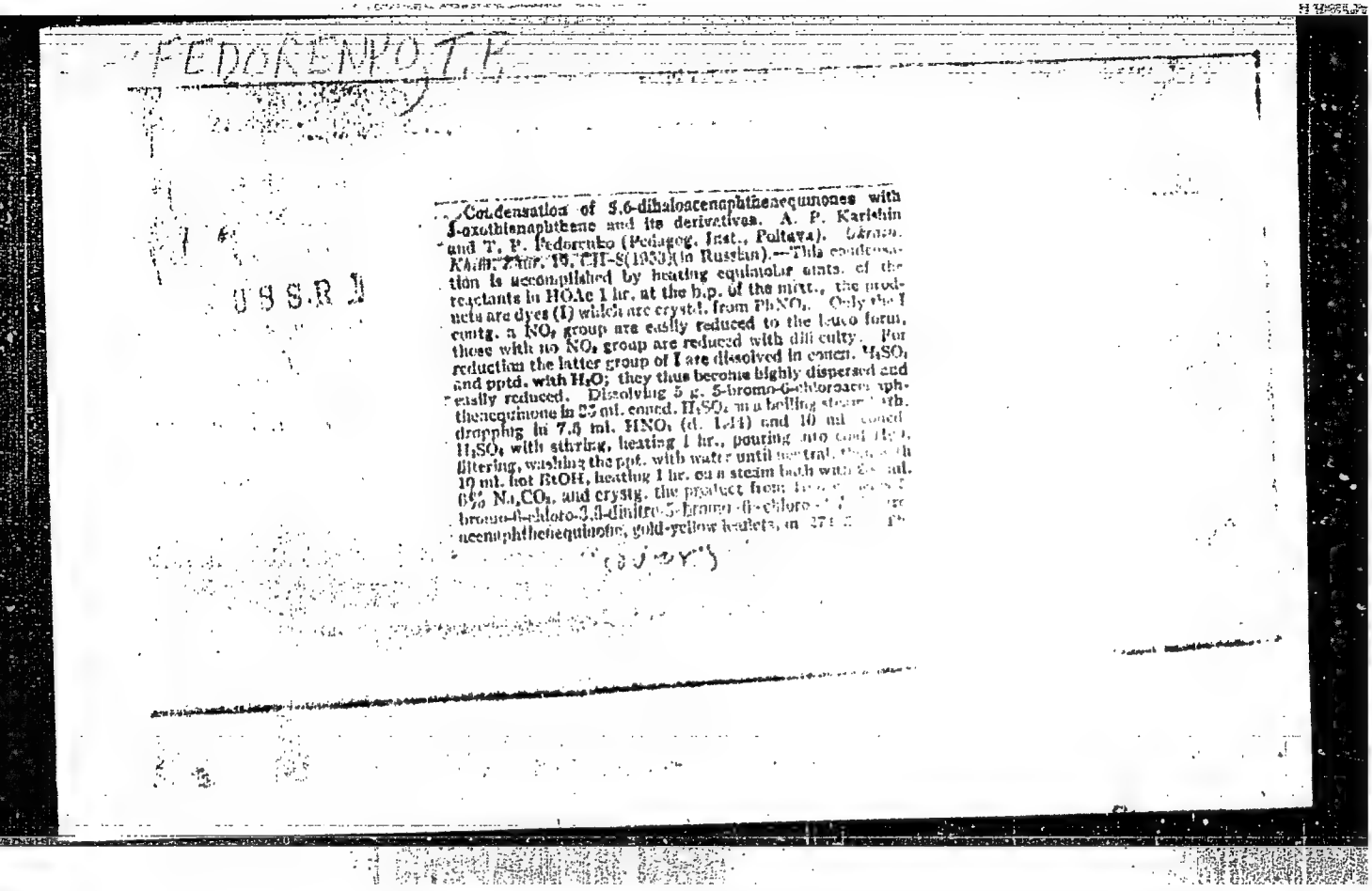

FEDORENKO, T. P.

USSR

Condensation of 5,6-dihaloacenaphthenequinones with 3-oxothianaphthene and its derivatives. A. P. Karlshin and T. P. Fedorenko (Pedagog. Inst., Poltava). Ukrain. Khim. Zhur. 19, CII-8(1953)(in Russian).—This condensation is accomplished by heating equimolar amts. of the reactants in HOAc 1 hr. at the b.p. of the mixt., the products are dyes (I) which are crystd. from PhNO$_2$. Only the I contg. a NO$_2$ group are easily reduced to the leuco form, those with no NO$_2$ group are reduced with difficulty. For reduction the latter group of I are dissolved in concn. H$_2$SO$_4$ and pptd. with H$_2$O; they thus become highly dispersed and easily reduced. Dissolving 5 g. 5-bromo-6-chloroacenaphthenequinone in 25 ml. concd. H$_2$SO$_4$ in a boiling steam bath, dropping in 7.5 ml. HNO$_3$ (d. 1.41) and 10 ml. concd. H$_2$SO$_4$ with stirring, heating 1 hr., pouring into cold H$_2$O, filtering, washing the ppt. with water until neutral, treating with 10 ml. hot EtOH, heating 1 hr. on a steam bath with 25 ml. 6% Na$_2$CO$_3$, and crystg. the product from [illegible] bromo-6-chloro-3,3-dinitro-5-bromo-6-chloro-[illegible] acenaphthenequinone, gold-yellow leaflets, m. 271° [illegible]

(over)

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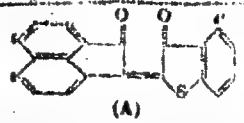
A. P. KRISHNA



(A)

following A were prep'd. (substituents, % yield, and m.p. given): 5,6-di-Cl, 93, 310–20°; 5,6-di-Br, 70, 350–1°; 5-Br, 6-Cl, 91, 321–2°; 5,6-di-Cl, 4,7-di-O$_2$N, 93, 345–6°; 5-Br, 6-Cl, 4,7-di-O$_2$N, 58, 340–3°; 5,6,6'-tri-Cl, 74, above 360°; 5,6-di-Br, 6'-Cl, 93, above 350°; 5-Br, 6,6'-di-Cl, 60, above 360°; 5,6,6'-tri-Cl, 4,7-di-O$_2$N, 49, above [illegible]; 5-Br, 6,6'-di-Cl, 4,7-di-O$_2$N, 61, 331–2° (decompn.); 5,6-di-Cl, 6'-EtO, 82, 283–5°; 5,6-di-Br, 6'-EtO, 84, 317–18°; 5-Br, 6-Cl, 6'-EtO, 65, 278–80°; 5,6-di-Cl, 6'-EtO, 4,7-di-O$_2$N, 35, above 360°; 5-Br, 6-Cl, 6'-EtO, 4,7-di-O$_2$N, 64, above 360°; 5,6,6'-tri-Cl, 4'-Me, 98, 342–4°; 5,6-di-Br, 6'-Cl, 4'-Me, 97, 359–0° (decompn.); 5-Br, 6,6'-di-Cl, 4'-Me, 94, 337–9°; 5,6,6'-tri-Cl, 4,7-di-O$_2$N, 4'-Me, 35, above 360°; 5-Br, 6,6'-di-Cl, 4,7-di-O$_2$N, 4'-Me, 61, above 360°. The following thiophanthrene analogs of A were prep'd: 5,6-di-Cl, 82, above 360°; 5,6-di-Br, 76, above 360°; 5-Br, 6-Cl, 74, above 330°; 5,6-di-Cl, 4,7-di-O$_2$N, [illegible]; 5-Br, 6-Cl, 4,7-di-O$_2$N, 66, above [illegible].

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

Fedorenko, T. P.

USSR/ Chemistry - Organic chemistry

Card 1/1 Pub. 116 - 18/30

Authors : Karishin, A. P., and Fedorenko, T. P.

Title : Condensation of dihaloidacenaphthenequinones with o-diamines. Part 1.

Periodical : Ukr. khim. zhur. 21/3, 373-376, June 1955

Abstract : Experiments were conducted to determine the condensation reaction of dihaloidacenaphthenequinones and dihaloiddinitroacenaphthenequinones with o-phenylenediamine, 2,3-toluylenediamine, 3,4-toluylenediamine, 5-bromo-2, 3-toluylenediamine and 1,2-naphthylenediamine. It is shown that the condensation reaction is perfectly easy in an acetic acid medium when the solution is heated to a boiling point. The properties of twenty-five new acenaphthylenequinoxalines are listed. Three USSR references (1947-1953). Table.

Institution : State Pedagogical Institute, Poltava

Submitted : March 12, and September 13, 1954

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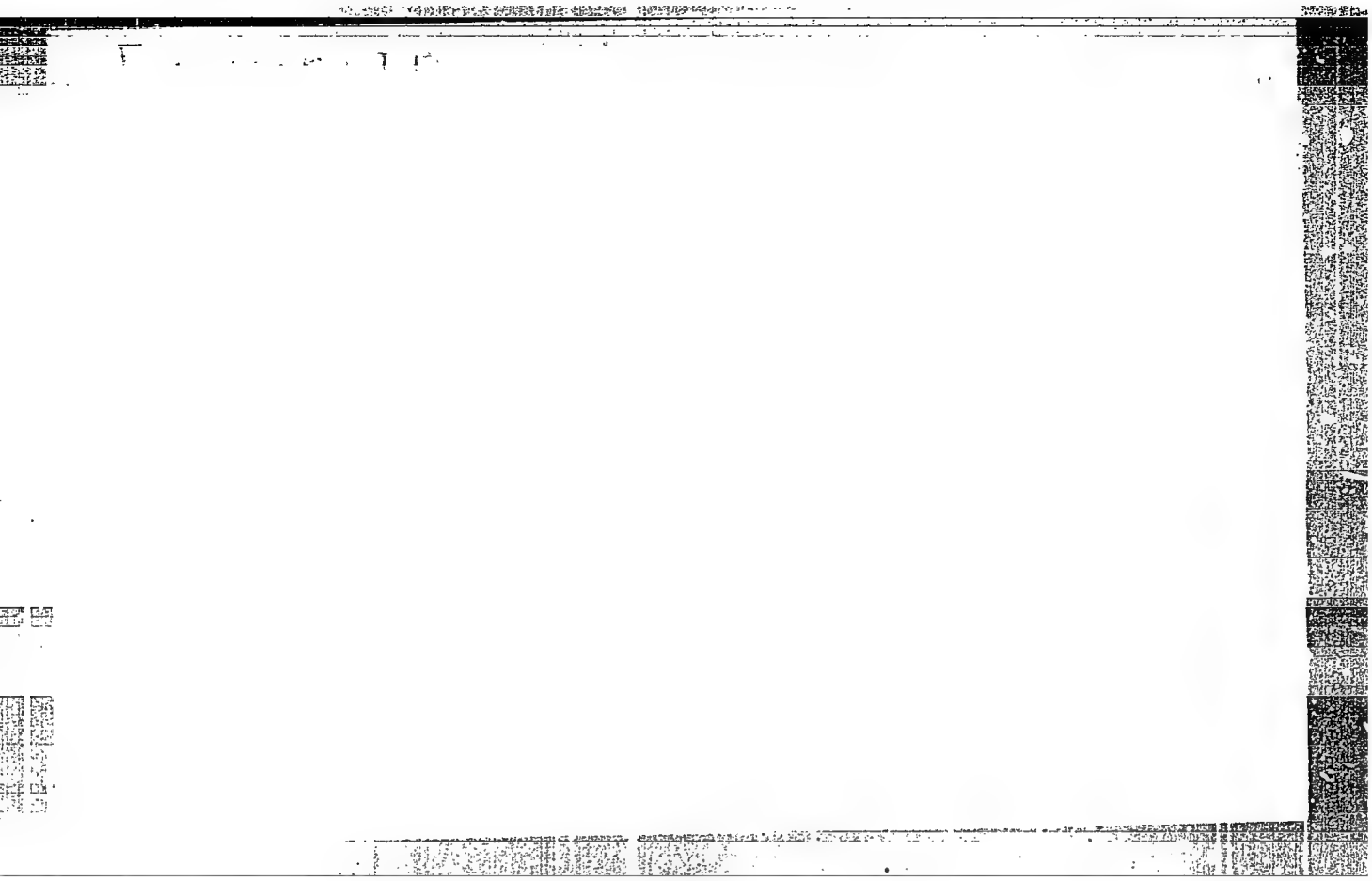

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, T. P., assistent

Preparation of mineral fertilizers. Khim. v shkole 17 no.6:84 N-D '62. (MIRA 16:1)

1. Kafedra khimii, Poltavskiy pedagogicheskiy institut.

(Fertilizers and manures) (Chemistry--Experiments)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, V.

Television receiver with 43LK9B kinescope. Radio no.1:21-23 Ja '65. (MIRA 18:4)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, V.

Television receiver using the 43LK9B kinescope. Radio no.2:21-23 F '65. (MIRA 18:4)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, V.

Building and improving villages in Zaporozh'ye Province.
Sil'.bud. 9 no.5:4-5 My '59. (MIRA 13:3)

1. Glavnyy inzhener upravleniya stroitel'stva oblupravleniya sel'skogo khozyaystva.
(Zaporozh'ye Province--Farm buildings)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, V.

FETISOV, P., inzhener; FEDORENKO, V., inzhener.

Fireproof electric water heater. Pozh.delo 3. no.2:27 F '57.
(MIRA 10:4)

(Water heaters)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, V., inzhener.

"Fire safety meas ures in designing and operating heating stoves" by A.A. Rubin. Reviewed by V. Fedorenko. Pozh. delo 3 no.7:32 Jl '57. (MLRA 10:8)

(Stoves--Safety measures)
(Rubin, A.A.)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, V.

Sod cutter. Sel'. stroi. 13 no. 9:23 S '58. (MIRA 11:10)
(Plows)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

BONDARENKO, V., inzh.; FEDORENKO, V., inzh.

Device for remote control of the rope pull in hoisting and transporting machines. Biul. tekhn. inform. 4 no.9:16-17 S '58. (MIRA 11:10)
(Remote control) (Hoisting machinery)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

YAKOVLEV, A., kand.tekhn.nauk; BUSHEV, V., inzh.; FEDORENKO, V., inzh.

Fire resistance of hollow flooring slabs made of reinforced concrete.
Pozh.delo 6 no.7:12-14 Jl '60. (MIRA 13:7)
(Concrete slabs) (Building, Fireproof)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

MOZZHUKHIN, Ye.; FEDORENKO, V.

A simple tube-type radio receiver. Radio no.11:44-47 N '62. (MIRA 15:12)
(Radio—Receivers and reception)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, V., kand.tekhn.nauk

Heat insulating material. Pozh.delo 9 no.1:12 Ja '63. (MIRA 16:1)

(Vermiculite) (Insulation (Heat))

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

9(6)

AUTHORS: Bezrodnyy, A. P., Engineer,
Fedorenko, V. A., Engineer

SOV/119-59-4-14/18

TITLE: An Electric Coal Level Indicator in an Adsorption Tower (Elektronnyy signalizator urovnya uglya v kolonne adsorbera)

PERIODICAL: Priborostroyeniye, 1959, Nr 4, pp 28-29 (USSR)

ABSTRACT: Such a device must comply with the following requirements: 1) The resistance R_x of the signal electrodes, at which the operation of the generator is stopped, must not exceed 100 ohms. 2) The second requirement arises from the stipulations of safety engineering: The potential between the signal electrodes must not exceed 1.5 v, and an rms value of 1.07 v for d. c. and a. c., respectively. 3) The device must provide for stable operation and the connection of leads with a length of 50 m must be possible (between the signalizer and the electrodes). In the Laboratory for Automation of the Kiyevskiy filial instituta Giprotransneft' (Kiyev Branch of the State Institute for the Design and Planning of Structures, Transportation and Storage in the Petroleum Industry) a level

Card 1/3

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

indicator complying with these conditions was developed and tested under laboratory conditions. The circuit of this signalizer consists of 2 oscillators with vacuum tubes of the type 6Zh4, of amplifier cascades with tubes 6N8 and of a supply unit. The device can be tuned by the following methods: 1) shunting of the oscillation circuit with an active resistance (~20,000 to 100,000 ohms). 2) Successive introduction of an active resistance R_d (~30 ohms) into the circuit of the feedback coil. 3) Introduction of a ferromagnetic core into the interior of the coil of the high-frequency transformer. It was readily seen from the experiments that the circuit can be tuned most simply by the second method. Automobile spark plugs with somewhat extended electrodes are best suited as signal electrodes. The performance of the oscillators can be controlled by tumblers. In this circuit electromagnetic d. c. relays of the type MKU-48 were used, which are supplied from a 220 v source. It is not advisable to supply this oscillator with a. c. The oscillator was d. c. fed through a germanium

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rectifier diode of the type DG-Ts27 and a filter element. This level indicator takes only about 30 w from the power supply. It is suited not only to the control of the coal level in an adsorption tower, but also for the control of other substances with an explosion hazard. Moreover it can be used as an element in circuits of automatic control. There are 2 figures.

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

A manual on drafting of machine constructions. 2. izd. Moskva, Gos. nauch.-tekhn. izd-vo mashinostroit. lit-ry, 1949. 143 p. (50-31109)

TJ230.F38 1949

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, V. A.

Spravochnik po mashinostroitel'nomu cherocheniiu [Reference book on mechanical drawing]. Izd. 3-e. Moskva, Mashgiz, 1953. 192 p.

SO: Monthly List of Russian Accessions, Vol. 7 No. 2 May 1954.

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

VYSOTSKAYA,N.N.; IERUSALIMSKIY,A.M.; NEVEL'SON,R.A.; FEDORENKO,V.A.; GOFMAN,Ye.K., redaktor; PUGACHEV,A.A., inzhener, retsenzent; POL'SKAYA,R.G., tekhnicheskiy redaktor

[Technical projections for articles made of sheet metal] Tekhnicheskie razvertki izdelii iz listovogo materiala. Pod obshchei red. A.M.Ierusalimskogo. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry, 1955. 230 p. (MLRA 9:1)
(Sheet-metal work)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, Viktor Alekseyevich; SHOSHIN, Aleksandr Ivanovich; IERUSALIMSKIY, A.M., professor, redaktor; GOFMAN, Ye.K., redaktor izdatel'stva; SOKOLOVA, L.V., tekhnicheskiy redaktor

[Machinery drawing handbook] Spravochnik po mashinostroitel'nomu cherchen'iiu. Pod red. A.M.Ierusalimskogo. Izd. 4-oe, ispr. i dop. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 208 p. (MLRA 10:4)

(Machinery--Drawing)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

25(5) PHASE I BOOK EXPLOITATION SOV/3350

Fedorenko, Viktor Alekseyevich, and Aleksandr Ivanovich Shoshin, Deceased

Spravochnik po mashinostroitel'nomu chercheniyu (Handbook on Machine Designing) 5th ed., rev. and enl. Moscow, Mashgiz, 1959. 244 p. 135,000 copies printed.

Reviewer: P. A. Grebnev, Engineer; Ed.: M. A. Gerb, Engineer; Ed. of Publishing House: L. Z. Simonovskiy; Tech. Ed.: L.V. Sokolova; Managing Ed. for Literature on the Design and Operation of Machinery (Leningrad Division, Mashgiz): F. I. Fetisov, Engineer.

PURPOSE: This handbook is intended for draftsmen and students of designing.

COVERAGE: This handbook presents the basic data necessary for the composition, standardization, and the checking of mechanical drawings. In the fifth edition, the information in this handbook has been supplemented and brought up to date in accordance with changes in general Soviet standards. Also taken into account

Card 1/7

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are comments made by the departments of mechanical drawing at a number of higher institutes of technical education and by reviewers. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

	PART I: FORM OF DRAWINGS	5
1.	Sizes of drawings	5
2.	Scales of drawings	6
3.	Basic rules for folding prints	8
4.	Lines of a drawing and their tracing	8
5.	Lettering	10
6.	Hatchure in sectional views and cross sections	13
7.	Dimensioning of drawings	14
8.	Specification of tolerances on drawings	24
9.	Specification of permissible deviations in the shape of parts on drawings	27
10.	Specification of the surface roughness of parts on drawings	28

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

REGO, K.G., inzh.; BELOZUB, V.V., inzh.; FEDORENKO, V.A., inzh.

Automatic adjustment of the needle case to its lowest position on the sewing machine. Izv.vys.ucheb.zav.; tekh.leg.prom. no.6: 101-106 '60. (MIRA 14:1)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti. Rekomendovana kafedroy avtomatizatsii proizvodstvennykh protsessov.
(Sewing machines)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, V.A.; SHOSHIN, A.I.; KULACHKOV, V.I., inzh., red.; YURKEVICH, M.P., inzh., red.izd-va; SHCHETININA, L.V., tekhn. red.

[Manual for machine drawing] Spravochnik po mashinostroitel'nomu cherchen'iiu. 7. izd., ispr. i dop. Moskva, Mashgiz, 1963. 280 p. (MIRA 16:8)
(Machinery—Drawing)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

FEDORENKO, V.A.

Semiconductor two-position level regulator for technological solutions. Leh. prom. no.4:32-34 O-D '65. (MIRA 19:1)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

ACC NR: AP6036029 SOURCE CODE: UR/0057/66/036/011/1964/1970

AUTHOR: Fedorchenko,V.D.; Muratov,V.I.; Rutkevich,B.N.

ORG: none

TITLE: The interaction of ionic cyclotron waves with high frequency oscillations of a plasma

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 11, 1966, 1964-1970

TOPIC TAGS: nonlinear plasma, turbulent plasma, plasma oscillation, plasma electromagnetic wave, nonlinear effect, plasmon, krypton, air, helium, electron beam

ABSTRACT: The work described in this paper is a continuation of earlier work of the authors (ZhTF, 32, 958, 1962; 34,458,1964; 35,2021,1965; Yadernyy sintez, 4,300,1964) on the nonlinear interaction of waves in plasmas. Plasmas were excited in krypton, air, or helium at pressures of the order of 10^{-4} mm Hg within a 9 cm diameter 100 cm long metal tube in a longitudinal magnetic field of from 0.4 to 1.0 kOe by a 2 cm diameter 50 cm long 200-250 mA beam of 160 eV electrons which was received by a floating collector. Under these conditions oscillations with a frequency of about 12 kHz developed in the plasma. These oscillations were investigated with the aid of adjustable electric probes, a magnetic probe, and an electron beam traversing the chamber parallel to and 2 cm from its axis, and it was concluded that they represent helical ionic cyclotron waves with the propagation vector almost perpendicular to the magnetic field. High frequency power from an external oscillator with a frequency

Card 1/2

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ACC NR: AP6036029

near the electron Langmuir frequency of about 0.5 kMHz or near the ion Larmor frequency of about 1.4 kMHz was injected at one end of the discharge chamber and the high frequency signal from the plasma was observed with the aid of an electric probe. When the high frequency power was turned on the amplitude of the ionic cyclotron oscillations increased and there appeared oscillations at frequencies equal to the sum and the difference of the frequencies of the high frequency oscillations and the ionic cyclotron oscillations. The low frequency satellite was stronger than the high frequency one. In a brief review of the present and the earlier work it is noted that in all the investigated cases of interaction between low and high frequency oscillations in plasmas there appeared oscillations at the combination frequencies and that, in accord with the concept of plasmon breakup and combination, the low frequency oscillations were strengthened or weakened by the presence of the high frequency oscillations according as the low or high frequency satellite was the stronger. The behavior of the combination frequency oscillations is sensitive to turbulence of the plasma and it is suggested that study of the combination frequency oscillations may prove to be useful in the investigation of plasma turbulence. Orig. art. has: 3 formulas and 7 figures.

SUB CODE: 20 SUBM DATE: 30Jul65 ORIG. REF: 007

Card 2/2

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

VSEKHSVYATSKIY, Sergey Konstantinovich [Vsekhsviats'kyi, S.K.]; FEDORENKO, V.F., red.; KHOKHANOVSKAYA, T.I.[Khokhanovs'ka, T.I.], tekhn. red.

[Origin and development of comets and other minor bodies] IAk vynykaiut' i rozvyvaiut'sia komety ta inshi mali tila. Kyiv, Vyd-vo Kyivs'koho univ., 1963. 93 p. (MIRA 16:12)

(Comets) (Meteors)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

GRISHILO, V.F.; FEDORENKO, V.F.; MINDRUL, A.I.; KOMPANETS, G.A.

Production of high-quality chrome leather from hides. Kozh.-obuv. prom. 7 no. 10:29-30 O '65 (MIRA 19:1)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

KOLESNIKOV, N.A.; KUBYSHEV, N.N.; FEDORENKO, V.G.; KARAPETYAN, V.K.; UNZHAKOV, M.S.

Intensification of the shaft furnace lead smelting process by augmenting the oxygen concentration. TSvet. met. 27 no.12: 33-38 D '64 (MIRA 18:2)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

ФЕДОРЕНКО, В. Г.

FEDORENKO, V.G., studingt IV kursu

I.IA.Franko on the social and economic status of western Ukrainian workers. Stud.nauk.pratsi no.22:39-50 '56. (MIRA 10:7)
(Galicia--Labor and laboring classes)

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14(8),14(11)

AUTHORS: Bondarenko, V. G., Kaplan, I. A., Fedorenko, V. G., Engineers

SOV/119-59-1-15/20

TITLE: Device to Control the Tension of Cables (Pribor dlya kontrolya natyazheniya kanatov)

PERIODICAL: Priborostroyeniye, 1959, Nr 1, pp 27-28 (USSR)

ABSTRACT: The Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii shakhtnogo stroitel'stva (All-Union Scientific Research Institute for the Organization and Mechanization of Mining) developed, constructed and tested the testing device DKK -20. The cable to be controlled runs over 2 fixed rolls and a load roll to receive the tension component of the cable. This load roll runs inside a tube and is connected with a ferromagnetic nucleus which is mobile in two cylindrical coils. A bridge circuit consisting of 2 inductances (the two mentioned coils) and apart from this 2 variable inductances is in equilibrium if there is no tension in the cable. There is therefore no current in the diagonals of the bridge. If there is a tension in the cable the nucleus of the first coil moves into the second. Thus a change of induction in the coils is caused,

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the bridge loses the state of equilibrium and a microammeter records the difference between the zero position and the new position with the extent of the shift of the nucleus being proportional to the tension in the cable. The scale of the microammeter is calibrated in tons. The device covers two ranges, e.i. from 0-10 and from 0-20 t. It can be used for cable diameters from 19 to 30 mm. By electrical measuring it is possible to measure the tension in the cable also at distant points of the cable. A special device permits an interruption of the movement of the cable at the moment where the desired tension is exceeded. The accuracy of measurement of the device is in the range of 3-5%. There are 4 figures.

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000412610014-2

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AUTHORS: Fedorenko, V.G., Kuznichenko, A.N., Prikhod'ko, A.I., Brisenko, V.K., Morozenko, V.Ya. (Engineers)

TITLE: Production Flow Lines for Bushings and Bracket Insulators (Potochnyye linii proizvodstva proknodnykh i opornykh izolyatorov)

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ABSTRACT: Flow lines for bushing and bracket insulator production have been installed at a number of insulator works but they do not cover the whole process of manufacture and usually terminate at the turning process. The production lines described in this article use belt conveyors along which the various machines and ovens are located; the lines are illustrated in Fig 1. The raw material is delivered on a conveyor, it is then extruded and the parts are cut to length and immediately turned on lathes. They are then conveyed to the drying ovens. The dried insulators are inspected for cracks and moisture content. The glazing procedures are somewhat different for insulators and bushings but both operations are served by the conveyor belt. A photograph of the production lines is given in Fig 2 and the bushing glazing section is shown in Fig 3.

Card 1/2

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